

Securities Experts

Roundtable

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What Percentage of Your Securities Cases Involves Fixed Income or “Debt”?

Any answer below 100% may mean you are missing opportunities to present your case to your and your client’s best advantage. Fixed income or “Debt” should be a portion of every account’s asset allocation model and fixed income is advantageous in the presentation of well managed damages. Both of these aspects will be covered in more detail later.

The infamous, often cited, “Know Your Customer” Rule 405 of the New York Stock Exchange, or its equivalent NASD Rule 2310 “Recommendations to Customers (Suitability)”, is the heart of most securities cases. It is usually coupled with the minimum responsibility that a broker and a brokerage firm may only offer securities that are suitable to the investment needs and objectives of the client at the moment of purchase. (Clearly other levels of responsibility are also required in the case of a “controlled” or discretionary account.)

Suitability

An investor, or a broker and brokerage firm, may only determine the suitability of an investment for a customer if the risks are both known and divulged. Only then may the investor or the broker make an informed decision whether the potential rewards justify taking that risk. The key is to identify the risks. While it is important to determine the rewards, knowing the risks is paramount.

To cite the obvious, there are fixed income or “debt” securities that meet every conceivable investment objective from preservation of capital, like Treasury bills or money market instruments, to speculative, such as high yield or “junk” obligations, many types of derivatives and convertibles.

Credit-Worthiness

The most creditworthy security on Earth is the U.S. Treasury bill maturing next Thursday. Even this security involves risk until the principal is repaid. In other words **all investments involve risk.**

Risks

The risks of equities are simple. As a part owner of the company equities have infinite maturity and may become worthless so an investor could lose 100% of their principal investment. The potential reward is the future value of the security, often determined by calculating the present value of the estimated future earnings and dividends. This is highly subjective based on numerous assumptions including the appropriate price/earnings ratio, often a multiple of the predicted growth rate.

Fixed income, or “debt”, is more complicated, in part because of its status. Debt is essentially the promise to pay principal at maturity usually with periodic interest payments along the way. Therefore the obligation is only as good as the issuer’s ability to fulfill it; in other words, the risks of that debt instrument. The reward is simpler: the present value of both the periodic interest payments and the principal value, usually known values except for variable rate instruments. Maturity dates are certain for non-callable issues like all Treasuries issued since February 1985. We will discuss uncertain dates, like mortgage-backed securities, later on.

There are a wide variety of risks and I will mention an obvious few: Maturity, Liquidity, Interest Rate, Spread, Quality, Imbedded Options (Put, Call, Sinking Fund Provisions and the like), Technology, Industry, Economic Cycle, and Event. Some may be positive or negative and all may change over time. A quick example will suffice. A sinking fund is a positive attribute when the debt is selling at a discount and a negative when the bond is at a premium.

Clearly the timing of the principal repayment is critical to the calculation of the yield to maturity if the price is above or below par. On certain instruments, like mortgage-backed pass-through securities, both the repayments amounts and dates are unknown so the actual yield to maturity is only calculable when the final principal payment is received. Therefore only reasoned estimates of yield to average life may be made before the entire principal is repaid. Principal will be repaid monthly and the time frame may be as short as next month extending out to as long as thirty years.

Prices will change as interest rates change and that begets the only thing you must know about fixed income. **If the price goes up the yield will go down, and vice versa.** It is as simple as that. Everything else is icing on the cake and may be mastered as needed in individual situations.

Adequate Disclosure on Confirmations and Statements

Examine the confirmations and statements carefully to determine if the client has been informed of the risks of fixed income or “debt” instruments. Obvious criteria include issuer, coupon, maturity, CUSIP, price, yield, rating (especially if the “debt” obligation is one of the top ten ratings considered investment grade or not), put, refunding or call provisions, etc.

If the bond is selling at a premium the yield to worst should be displayed not the higher yield to maturity. Variable rate instruments should show both the index and spread to determine the coupon rate and the time interval; step up and step down coupons should furnish that data; mortgage-backed securities should show the estimated yield to average life based on the average maturity, which is derived from the prepayment assumption, and the expected window (months and years) of principal repayments.

Mortgage-backed securities should also show stress testing, specifically what changes up and down 300 basis points in 100 basis points increments would do to prepayment assumption that would, in turn, impact dynamically the average maturity, the estimated yield to average life as well as the payment window. Remember my adage that you cannot assess whether you are adequately being compensated (rewarded) if you do not know the risks.

Most, if not all, confirmations and statements omit at least some of this data. Stress testing on CMOs, for example, is likely only presented with supplemental documentation like Bloomberg worksheets and here you have to carefully examine the settings, many of which can be inputted, changed or overwritten by the subscriber. One useful tool is to look back at the original estimates used when the issue was brought to market and compare the actual results to that prediction and adjust correctly. A lunacy of mortgage-backed security analysis is that a constant prepayment speed is presumed throughout and used in the various calculations when the actual experience will undoubtedly vary significantly from month to month.

Pricing

Almost invariably the monthly pricing of debt instruments is matrix derived, as opposed to actual market bids and offerings. Matrix pricing estimates the price of a debt instrument by comparing its characteristics to other securities. All debt instruments are priced at a spread to comparable Treasuries, because of their unparalleled credit-worthiness and liquidity. Examine the fine print on the back of the statement to see the restrictions on the accuracy of these prices. TRACE (Trace Reporting and Compliance Engine) instituted by the NASD effective October 1, 2004 may result in more accurate pricing as it evolves. More accurate pricing is sorely needed for the benefit of all market participants.

Mark-ups and Trading Profits?

Virtually every purchase and sale of a debt instrument in the secondary market is made on a principal basis by the executing dealer. (The only mandatory agency transactions are \$1,000 to \$9,000 face amount of NYSE listed corporate bonds.) Neither the base price nor the mark-up or mark-down is disclosed to the client. In order to determine if excessive mark-ups have been taken it is necessary to obtain both the commission runs of the registered representative and the firm's proprietary trading account transactions in the security or securities in question. Moreover the NASD guideline of a maximum of 5% is limited to equities and fixed income instruments are supposed to be less than that and determined by difficulty of execution and other factors such as term of maturity. It is also well to keep in mind that the combined mark-up and mark-down of a simultaneous purchase and sale should not exceed a total of 5%. As an example Class B mutual fund sponsors pay the brokerage firm 4% so a simultaneous sales mark-down should be 1% or less.

Purchases in the primary market, new issuance, while also principal transactions, are different to the extent that the prospectus or offering circular will divulge and break down all the fees paid to the underwriters by the issuer.

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Why should Debt be part of every portfolio?

Let's return to the notion mentioned earlier that fixed income or "debt" should be part of every investor's portfolio. Why? How much? Etc.

Fixed income or "debt" is a counter balance to the 100% risk of equity investments. How much depends on the fixed income instruments selected. Fixed income covers the universe all the way from that Treasury bill maturing next Thursday to that dreaded D word "Derivatives" and everything in between.

By the way my definition of a derivative is simply a new security recreated from another instrument. That describes a wide variety of investment products such as futures, options, all mortgage-backed securities, other asset-backed securities and a host of others, including variations on a theme such as Collateralized Mortgage Obligations, a derivative of the derivative mortgage-backed security.

I would also include mutual funds, open and closed end, unit investment trusts (UITs), and exchanged traded funds (ETFs) in the derivative category but that is a topic unto itself, with many nuances to be explored and digested.

Just be aware of the obvious facts that UITs and ETFs are unmanaged investment products. Open-end mutual funds are sold on a principal basis in a variety of classes, always a consideration in every case. Closed-end and UITs are initially underwritten and sold on a principal basis; while EFT and secondary closed-end fund and UIT transactions are executed on an agency basis.

While Derivatives enjoy a sullied reputation, for good and sundry reasons in many cases, there are good derivatives as well as bad ones. An example is STRIPS, Separate Trading of Registered Interest and Principal of Securities, the component interest or principal payment of a U. S. Treasury note or bond created by an investor or dealer not issued by the Treasury itself.

Another example of a good derivative is Mortgage-backed Pass-through securities (MBS), which began in 1970. MBS enabled financial institutions, initially savings banks and the credit unions, to “reliquify” by selling mortgages to investors and issue new ones to meet the demand of the “American Dream”, home ownership. (Whether later created derivatives like CMOs, especially certain tranches such as Interest Only (IO) or Principal Only (PO) meet those same “good” criteria needs to be examined on a case by case basis.)

How Much?

How much of an investor’s asset allocation model should be in fixed income or “debt”? The glib answer is: it depends on the client’s investment needs and objectives. I think a better approach is to quantify the percentage that should be in fixed income by a more objective approach. One benchmark is that **the percentage should approximate the client’s age as a percent of the total** which mandates that the percentage would increase as time passes matching most client’s needs and objectives to become more oriented to preservation of principal and income as they near retirement or are actually retired.

This approach also means that every account should have a portion in equities as well as fixed income or “debt”. The ninety year widow dependent on her nest egg to live in retirement should still have 10% in equities if this formula is strictly applied. The opposite is also true for the ten year old child, where no more than 90% is appropriately invested in equities.

This asset allocation model is not as draconian as it appears. The entire spectrum of products exist within fixed income or “debt” to meet every investment need and objective from the nearly “riskless” investment of the Treasury bill maturing next Thursday to esoteric instruments where 100%, or even more, of the investment could be lost overnight.

Some variations of fixed income instruments are, in fact, hybrid securities such as convertible bonds which have much of the upside potential of the stock as well as the downside protection of a debt instrument. That bond value is the floor but that floor might better be considered the floor of an elevator and rise or fall as risk factors change over time, factors such as interest rates, creditworthiness, technology, inflation, and a myriad of others.

Never neglect the possibility of event risk, external or internal, even though it is usually both unpredictable and, therefore, unquantifiable. Event risk includes mergers and acquisitions as well as war and could be positive or negative, or both, to fixed income holders. As an example the merger of

Telecommunications, Inc. into A T & T was a positive for Telecommunications bondholders while it was, at the same time, a negative for A T & T bondholders.

Fixed Income or “debt” receives short shrift in financial press, certainly relative to its importance in our capital markets. Fixed income or “debt” dominates the equity portion of capital markets in every category, amount outstanding, new issue issuance, and secondary trading. See the accompanying table for specifics but suffice it to say that the amount of “debt” outstanding is at least twice the market value of equities, 90+% of new issue issuance, and 90+% of secondary trading, even though we only know the amount of Treasury transactions between reporting dealers to the Federal Reserve, not other secondary trades. (See attached Table of Economic Statistics for detail.)

Volatility

Moreover the volatility of “debt” transactions is quite significant. Many people know that the stock market, as measured by the Dow Jones Industrial Average, dropped 508 points or 23% on October 19, 1987 but how many know what the bond market did. The 30-year Treasury, 8-7/8% due August 15, 2017, sold at a price of 85% (10.529YTM) at 11:30AM that Monday morning. The next day, London’s close, and New York’s opening, at 8:30AM the same bond was trading at 98-1/2% (9,018YTM), fully 13-1/2 points higher in 21 hours.

I have kept track of bond yields for the past thirty years at year-end and the high and low yields of the thirty-year bond for the past sixteen years. (I have also tracked the yield levels of Treasury quarterly auctions since the long bond was reintroduced in 1975 as that helps determine some of the intra-year fluctuations. The high was February 1982 @ 14.56% while the low was 5.298% in February 2001 because the thirty-year auction was discontinued in August 2001. (Long term interest rates, the thirty-year bond, have been in a secular downtrend from a double top of 1981 -1984 of 13.45% at year-end 1981 to perhaps a low of 4.78% at year-end 2002, and an intra-year low of 4.17% in June 2003.) (See attached Table of the Year-end Closing Yields of Treasuries from 1975-2004. Notice how we have been in a cyclical downtrend in interest rates from the peaks in 1981 and 1984 to 2003. Was that the low?)

Intra-year high and low yield volatility is high, greater than most think. It has ranged from a low of 87.1 basis points in 1992 to a high of 205.4 basis points in 1994 and averaged 136.4 basis points over the sixteen year period (1989-2004). Only twice has the volatility been less than 100 basis points, 1992 and 91.1 in 2004. (See attached Table for the Volatility of both 10-year notes and 30-year bonds.)

Yield in terms of Price – the Value of a 0.01

What does this mean in terms of price? A one point change in price of a thirty-year bond at 5% yield to maturity equals an opposite 6.4 basis points change in yield. That means the average volatility of 136.4 basis points of thirty-year bonds is a price change of 21.3 percentage points; that's right over one-fifth of the face value. The impact of price change in terms of yield declines as maturity lengthens. (see attached Table for Value of a 0.01 showing the range over all maturities. The bottom of the Table also shows that yield changes of one point in price of the same long term maturity increase as the yield goes up.)

Should Margin be Employed?

If you accept my notion that every account should have a portion of their assets in fixed income or "debt" then **it is probable that margin is inappropriate** in most if not all instances. Generally speaking only high yield or "junk" bonds will have a higher current yield, coupon divided by price, than the margin interest rate. However most investors do not have an adequate size to purchase an appropriate diversified portfolio of high yield debt in round-lot, market price efficient, amounts.

Mutual Funds

Therefore open or closed-end mutual funds may be the only viable method for most investors to invest in this segment of the fixed income market. That is an exception, one of two, to my bias against mutual funds for fixed income investment. The major advantage of fixed income or "debt" is a fixed final maturity date, perhaps fulfilled earlier, and usually periodic interest payments along the way, depended solely on the issuer's ability to fulfill those obligations. Facetiously I have mused that my mistakes, if creditworthy, pay their principal at maturity and that is far from the worst investment in the world.

Mutual funds, however, take that fixed final maturity date and turn it into an imponderable. The only way you can get out of a mutual fund is to liquidate it.

In the meantime you must pay management fees that reduce both current yield and total rate of return, hopefully more than offset by portfolio management including round-lot price advantage in trade execution. There are also the issues of the classes of mutual fund shares offered to the investor and the amount of sales charges up front or the contingent deferred sales charges in the event of “early” liquidation in some classes.

Margin is available in other ways

Returning to margin, if leverage is appropriate or desired, derivatives, especially futures and options will provide that. Other products like STRIPS will magnify investment results because of the lower price than coupon paying Treasuries but maintain the unequalled creditworthiness of the United States Government, backed by the unlimited taxing authority of the Congress to assure the timely payment of interest and principal. IO and PO tranches of CMOs allow institutions to speculate on interest rate movements and leverage their investment results or offset other assets or liabilities.

Margin, of course, will magnify investment results and may only be suitable for highly speculative accounts. Because of the quality of the underlying Treasury margin may be well under 10% on these instruments and a hiccup in price will ripple many-fold into the total rate of return.

Well Managed Damages

If you accept my premise that all accounts should have a portion of their investments in fixed income or “debt” investments then one can easily apply that strategy to the calculation of “well managed damages”, the second part of damage presentation.

Out of pocket losses are essentially self evident and are simplistically the sum of all cash (or security) contributions less cash (or security) withdrawals. If you exclude interest received or (charged) and dividends and concentrate on the actual cash (or security) contributions and withdrawals only you may apply an index or combination of indices to estimate what the account value should have become if the investment needs and objectives had been followed. This difference is one method of presenting the damage to the investor and the statutory interest should be added from the closure of the account to the

beginning of the arbitration hearing or court trial. If the purpose of arbitration is equity, not strict adherence to law, then well managed damages may resonate.

Well managed damages may be larger than out of pocket losses and most advantageous to a claimant in this circumstance. However well managed damages may also be useful to offset the standard defense that everyone lost money during that period of time, an excuse bandied about more often these days. Well managed damages will clearly demonstrate the “market effect” on the account versus actual results.

Clearly the use of fixed income indices may offset equity market declines in periods such as the precipitous decline following the NASDAQ peak in March 2000. One method might be to create a table showing the well managed damages using various combinations of long term Treasuries with S & P 500 and NASDAQ Composite indices. In the attached Table of Hypothetical Well Managed Damages I used a range of 2000 through 2004. Clearly the devil is in the details and the timing of cash contributions and withdrawals may significantly skew the actual results in individual cases.

A few caveats are in order in looking at this example. If you examined the indices themselves you would notice some abnormalities, particularly month to month. The NASDAQ Composite index far outperformed all other indices over the period November 1999 through February 2000 rising over 40% in four months. This was, in fact, the “irrational exuberance” of the stock market described three years too early by Alan Greenspan in late 1996.

If you look at the Long Term Treasury returns from January 2000 through December 2004 you see how fixed income or “debt” far outperformed the equity indices for the same period of time, just as one would have expected, rising over 55%, or 11.5% compounded annually.

All of these comments reinforce the fact that the dates involved as well as the timing of cash contributions and withdrawals can and will likely dramatically skew the results of the well managed damages calculations.

(Instead of the sources used in this Hypothetical Well Managed Damages Table one could use Ibbotson indices because they offer a wide spectrum of fixed income or “debt” indices as well as large company (S & P 500 Index) and small company equity indices. Moreover their indices are available monthly from December 31, 1925 to the present. Ibbotson Associates, Ibbotson.com 800-758-3557)

What Asset Allocation Model is Appropriate?

One of the more difficult decisions is what combination should be utilized in calculating well managed damages. Some may take the pragmatic approach of whatever combination maximizes results. I am unalterably opposed to using 100% in either extreme; in part because I believe all accounts should have proportionate investment at all times in both fixed income or “debt” and equities. My answer is to use a combination that you are comfortable defending as meeting the customer’s needs and objectives. Granted that may be more subjective than scientific.

Risk versus Reward

Even an account that has investment needs and objectives of preserving principal and current income should have a portion in equities. Believe it or not 100% investment in any fixed income or “debt” index has either a lower rate of return and/or a higher risk that the optimum combination of 75% “debt” 25% equity shown in the Risk versus Reward Stocks versus Equities chart available from Ibbotson. Remember that Ibbotson does not have indices that track either emerging market or high yield fixed income markets. As you can see from the slide the actual chart itself is a fishhook showing risk on the “X” axis and the rate of return on the “Y” axis with risk rising as “debt” climbs to 100% from a nadir of around 75%. This is counter intuitive perhaps less so than the fact that the total return declines as well over the same range.

These are some of the reasons why I believe that **fixed income or “debt” is the answer in presenting all securities cases for your client’s best advantage.**